A Research on User Satisfaction of Running Enterprise Resource Planning for Small and Median Enterprises in Taiwan

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Abstract

This research mainly explores the antecedent factors, training, user's participation and supportive leadership, and their possible effect on user's satisfaction with the ERP system. The research summary focused on the antecedent factor’s effects on user's job performance. The data presented here were collected from 115 employees of 20 Taiwanese SMEs currently using the ERP system. Drawing on LISRL to analyze the data, both training and supportive leadership evidently affected user's satisfaction, and improved job performance. Meanwhile, users’ satisfaction played a mediate role among the training, participation, supportive leadership, and job performance. Based on the findings, some managerial implications and suggestions were discussed.

Keywords: small and medium enterprises (SMEs), user’s satisfaction, enterprise resource planning (ERP)
1. Introduction

Facing the global planning-and-management oriented world, small and medium sized enterprises (SMEs) must keep trying hard to improve both the software and hardware used in their facilities to raise their competence and contribute to more effective marketing of their products worldwide. The Enterprise Resource Planning System (ERP), derived from 1990’s management information systems, has been developed to help enterprises integrate the information gathered from their own internal departments so as to raise their job performance.

Although various scholars have different viewpoints of the critical factors essential to successful use of the ERP system, user satisfaction is the factor identified by most of them as a leading influence on SMEs in this regard. To evaluate the ERP system, therefore, user satisfaction can be utilized as an important index to show if the information system works successfully (Powers, 1973; Melone, 1989; Bradford & Florin, 2003).

However, in the process of bringing the ERP system into SMEs, several questions can be raised: What are the factors that influence user satisfaction most? Can user satisfaction really result in a beneficial effect on business operations? Seldom does the existing literature seek answers to these questions. Therefore, this research mainly explores the antecedent factors - training, user's participation and supportive leadership - and their possible effect on user satisfaction with the ERP system, and also on a user's job performance. Furthermore, this research endeavors to determine whether user satisfaction plays a mediate role among the training, participation and supportive leadership factors.

In Taiwan, large businesses have been using the ERP system for a long time, but SME use of the system is relatively new, so that there is little related literature. The focus of this research, therefore, is on Taiwanese SMEs, with the aim of determining information of value to such companies when they start to use the ERP system. In our research, we concerned some topics as followings about Taiwanese SMEs use the ERP system.

(1) What is the relationship between user training and user satisfaction?
(2) What is the relationship between user participation and user satisfaction?
(3) What is the relationship between supportive leadership and user satisfaction?
(4) What is the relationship between job performance and user satisfaction?
(5) Whether user satisfaction plays a mediate role among the training, user participation, supportive leadership and job performance?

2. Literature Review

2.1 Factors Influencing ERP User Satisfaction

User satisfaction is affected by the participation, training and supporting leadership (Bradford & Florin 2003). This research explores the relationship between user satisfaction and the
training, participation, and supportive leadership when using ERP system.

Training programs aim to train newly hired and current employees in the skills necessary for them to carry out their job smoothly (Dessler, 1994). The purpose of training is to improve an employee’s knowledge, skills and abilities, and to further change their attitude and self-confidence so as to improve their job performance (He & Yang, 1996). In addition, training can raise user satisfaction (Bradley & Lee, 2007). When enterprises start using the ERP system, superior or inferior training affects user satisfaction while operating the system.

On this basis, therefore, this research presents hypotheses as follows:

**H1: The Better the Training, the Higher the User Satisfaction.**

The process of using the ERP system involves the adjustment of a firm’s management system and operational procedures (He & Yu, 1999). When starting to use the ERP system, enterprises should first establish an internal common consensus, departments must communicate well with one another, all employees should fully understand what the organization and users need, and then make a proposal to adjust accordingly.

To successfully use the ERP system, enterprises must make a full-dimension adjustment for their organizations (Wu, 2002). The adjustment includes whole operation procedures, reallocation of resources, responsibilities of positions, etc. They must prepare a time schedule for bringing the ERP system in, understand the reason for using it, and set up a common goal with which all employees agree in order to achieve a harmonious work environment.

In an organization, the perception control of employee’s participation has a lot to do with the variable of employee’s attitude toward their work (Spector, 1986). The higher the staff participation, the higher user satisfaction, organizational commitment, job performance, and work motivation will be.

Therefore, in the process of SMEs using the ERP system, this research presents a hypothesis as follows:

**H2: The Higher the Participation, the Higher the User Satisfaction**

In an organization, failing taking advantage of technology is mainly caused by the users; seldom does the technology itself fail (Garson, 1993). The problem of after-sale-service quality of the computer derives from the relationship between the management, who offer the technology, and users (employees). High-management support can improve internal communication and achieve effective coordination and integration. The support can further avoid complicated and difficult managerial problems caused by unfairly allocating resources, so as not to harm organizational harmony and cooperation (Raghunathan, 1992). This is a key factor for the development of the ERP system and executive activities, and it is clear that user participation affects user satisfaction in the use of an ERP system (Bradley & Lee, 2007).

The research above indicates that the high-management support greatly affects user’s acceptance of the ERP system in the process of actually using the ERP system and consequently affects the user’s satisfaction. As a result, this research presents a hypothesis as
follows:

**H3: Supportive leadership has a positive influence on user satisfaction.**

There is ample evidence that user satisfaction affects job performance (Organ, 1977). Raising staff’s satisfaction makes sales members willing to learn more skills, which subsequently improves sales efficiency – hence, a positive correlation exists between user satisfaction and job performance (Bernard & Ajay, 1991). User satisfaction can also affect the variable of personal reaction; therefore, a significant correlation exists between user satisfaction and job performance (Seashore & Taber, 1975). However, the ERP user’s satisfaction is an important index of job performance since user satisfaction can influence an individual performance (Kositanurit et al., 2006).

As a result, this research presents a hypothesis as follows:

**H4: User’ Satisfaction has a Positive Correlation with Job performance**

### 2.2 Mediate Effect of the ERP User Satisfaction

User satisfaction is always considered as a crucial variable of a mediate effect in existing literature. When probing into consumer behavior, customer satisfaction is a mediate factor between service quality and re-consuming. This research anticipates that the user satisfaction plays a mediate-effect role among the training, participation, supportive leadership, and job performance factors. As a result, this research presents hypotheses as follows:

**H5a:** ERP user satisfaction plays a mediate-effect role between the training and the job performance.

**H5b:** ERP user satisfaction plays a mediate-effect role between the participation and job performance.

**H5c:** ERP user satisfaction plays a mediate-effect role between the supportive leadership and job performance.

### 3. Methodology

#### 3.1 Ideological Framework

The framework of this research mainly consists of five exogenous variables (supportive leadership, participation, training, user satisfaction and job performance) and a mediate variable (user satisfaction), focusing on the influence of supportive leadership, participation, and training on user satisfaction, the influence of training on user satisfaction, and the mediate effect of user satisfaction, in the process of using the ERP system.
3.2 Definition of Variables

3.2.1 The ERP system user satisfaction
This research is based on the revised user satisfaction scale derived from analyzing (Kettinger & Lee, 1997) the user satisfaction scale of USISF informational service functions. The dimensions and make-up variables of the user satisfaction scale include: 1) the accuracy, 2) the exactness, 3) the reliability, 4) and the suitability of the ERP system’s hardware and software.

3.2.2 Training
Based on the user satisfaction scale (Simon et al’s experimental design, 1996, aiming at the training models of different computer systems), this research aims to evaluate user’s feelings and reactions after finishing training. Also, this research plans to modify the scale suitable for ERP system training courses. The dimensions and the make-up variables of training include: 1) the training provided by advisors, 2) the user’s understanding of the system, and 3) the services provided by advisors.

3.2.3 Participation
This research evaluates participation according to the dimensions suggested by Kim and Lee (1986). The questionnaire items include 1) user participate in the ERP system’s R&D, and 2) the extent to which users’ suggestions can be weighted and accepted by their company.

3.2.4 Supportive Leadership
This research refers to the dimensions suggested by Doll (1985) to evaluate whether supportive leadership is high or not. Questionnaire items include: 1) high-rank management’s
attitude toward trying to carry out the ERP system; 2) high-rank management’s understanding and interest in the ERP system; 3) high-rank management’s participation in the ERP system’s R&D, and 4) high-rank management’s level of support of needed expenditure for the system.

3.2.5 Job performance
This research evaluates the change of the ERP system’s job performance based on the dimensions of Kim (1990). Management should assess their staff’s performance. Questionnaire items ask whether 1) the ERP system can improve job quality, 2) the ERP system can effectively finish jobs, and 3) the ERP system can assist in making better decisions.

3.3 Questionnaire design
The entire questionnaire survey is based on the five-point scale (Likert), in which one point means “extremely disagree”, two points “not agree”, three points “neither agree nor disagree”, four points “agree”, and five points “extremely agree”. The questionnaire has twenty items (basic information items deducted), in which independent variables are evaluated by staff members themselves, and the job performance of dependent variables are evaluated by management.

This research used convenience sampling. The questionnaire surveys were only completed by companies using the ERP system in the industrial areas around Taipei and Tao Yuan counties, Taiwan. Twenty companies participated, and 120 questionnaires were handed out and recovered immediately. Of these, 115 were usable, yielding an effective survey ratio of 96%.

4. Result and Discussion
4.1 Examination of Reliability and Validity
The values of Cronbach’s $\alpha$ in this research all reach or surpass 0.80, so the reliability is excellent. In addition to Cronbach’s $\alpha$, the goodness of fit of this research model has also been evaluated. The evaluation mainly focuses on the goodness of fit of the theoretical model and sample materials; in other words, the external quality. The higher the goodness of fit is, the more usable the model will be. Table 1 shows the whole goodness of fit indexes (GFI) have reached the cited scholars’ suggestions, so the scale has an excellent goodness of fit.

<table>
<thead>
<tr>
<th>Index</th>
<th>Standard</th>
<th>Scholars’ suggestion</th>
<th>Goodness of fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFI</td>
<td>Over 0.9</td>
<td>Bagozzi and Yi (1988)</td>
<td>0.97</td>
</tr>
<tr>
<td>NFI</td>
<td>Over 0.9</td>
<td>Bentler and Bonett (1980)</td>
<td>0.94</td>
</tr>
<tr>
<td>NNF1</td>
<td>Over 0.9</td>
<td>Bentler and Bonett (1980)</td>
<td>0.96</td>
</tr>
<tr>
<td>IFI</td>
<td>Over 0.9</td>
<td>Bentler and Bonett (1980)</td>
<td>0.97</td>
</tr>
<tr>
<td>SRMR</td>
<td>Under 0.1</td>
<td>Hu and Bentler (1999)</td>
<td>0.08</td>
</tr>
<tr>
<td>$\chi^2$/d.f.</td>
<td>Under 3</td>
<td>Hayduk (1987)</td>
<td>2.78</td>
</tr>
</tbody>
</table>

Validity, also called exactness, is a tool that can exactly find out the attributes needed to
be measured. With respect to the validity’s evaluation, this research uses Convergent Validity (CV) and Discriminative Validity (DV), analyzed by the software of LISREL statistics, to assess the scale’s exactness. The CV and DV presented in this research, and all items’ workloads and t-values are listed in Table 2. Because all absolute values of t-value are higher than the significant level, 2(α=0.05), the scale conforms to the CV. The DV of independent variables’ dimension shows in table 4-3. If the value 1 does not fall in the interval between two standard deviations of coefficient of correlation, a DV exists. Each dimension conforms to the DV.

Table 2 Measurement Scale of Each Dimension’s CV

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Workload(β)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>User satisfaction</td>
<td>4</td>
<td>0.72–0.92</td>
<td>7.87–9.40</td>
</tr>
<tr>
<td>Training</td>
<td>4</td>
<td>0.72–0.85</td>
<td>8.43–10.46</td>
</tr>
<tr>
<td>Participation</td>
<td>4</td>
<td>0.77–0.92</td>
<td>8.95–11.09</td>
</tr>
<tr>
<td>Supportive Leadership</td>
<td>4</td>
<td>0.73–0.77</td>
<td>6.89–7.20</td>
</tr>
<tr>
<td>Job performance</td>
<td>4</td>
<td>0.82–0.89</td>
<td>10.47–11.36</td>
</tr>
</tbody>
</table>

Table 3 Measurement Scale of Independent Variable’s DV

<table>
<thead>
<tr>
<th></th>
<th>Training</th>
<th>Participation</th>
<th>Supportive Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>0.86</td>
<td>(0.04)</td>
<td>0.78–0.94</td>
</tr>
<tr>
<td></td>
<td>0.78</td>
<td>(0.05)</td>
<td>0.68–0.88</td>
</tr>
<tr>
<td>Supportive Leadership</td>
<td>0.75</td>
<td>(0.06)</td>
<td>0.63–0.87</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

value in (): standard deviation, value above (): coefficient of correlation, Value under (): confidence interval of coefficient of correlation

4.2 Verified Results of Hypotheses

4.2.1 Verification of the Direct Effect
As shown in Table 4, the path from participation to user satisfaction does not reach the significant level. The reason might be that most ERP systems used by SMEs are pre-designed software, so that average users can only adjust some tables in the systems and cannot modify the manipulation process and programmatic columns inside. To most users, using the specific ERP system offered by their companies means that they cannot make any suggestions because they do not have any way of comparing what they are using with others.

Table 4 Verified Results of the Hypothesis Path

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>T-Value</th>
<th>Hypothesis Relationship</th>
<th>Verification Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Training → User Satisfaction</td>
<td>2.74*</td>
<td>+</td>
<td>Stand</td>
</tr>
<tr>
<td>H2</td>
<td>Participation → User Satisfaction</td>
<td>-1.27</td>
<td>+</td>
<td>Not Stand</td>
</tr>
<tr>
<td>H3</td>
<td>Supportive Leadership → User Satisfaction</td>
<td>5.61*</td>
<td>+</td>
<td>Stand</td>
</tr>
<tr>
<td>H4</td>
<td>User Satisfaction → Job performance</td>
<td>7.56*</td>
<td>+</td>
<td>Stand</td>
</tr>
</tbody>
</table>

*: standard coefficient |value|≥|2
4.2.2 Verification of the Mediate Effects

In connection with the comparison of a nested model of mediate effects, model 1 is a part mediate model including three paths, (A)→(B)→(C). Model 2 is a direct model, (A)→(B) deleted, and model 3 is a full mediate model, (A)→(C) deleted. The comparisons and analyses of three mediate models are shown in tables 5(a), 5(b), and 5(c).

Table 5(a) Comparison and Analysis of Mediate-Effect Model
Training (A)→User’s satisfaction (B)→Job performance (C)

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\Delta\chi^2$</th>
<th>$\Delta$df</th>
<th>CFI</th>
<th>NFI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1, Partial Mediate Model</td>
<td>450.30</td>
<td>164</td>
<td></td>
<td></td>
<td>0.96</td>
<td>0.94</td>
<td>0.96</td>
</tr>
<tr>
<td>Model 2, Direct Model</td>
<td>472.74</td>
<td>165</td>
<td>22.44**</td>
<td>1</td>
<td>0.96</td>
<td>0.94</td>
<td>0.95</td>
</tr>
<tr>
<td>Model 3, Full Model</td>
<td>478.71</td>
<td>165</td>
<td>28.41**</td>
<td>1</td>
<td>0.96</td>
<td>0.94</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Notes: * : P<0.05, ** : P<0.01

When the error of degree of freedom of Chi-Square is 1 and Chi-Square variate ($\Delta\chi^2$) is larger than 3.84, the variate is very significant. In Table 5(a), significant differences show among models 1, 2 and 3 and the path cannot be simplified, so the model of user satisfaction between training and job performance is a part mediate-effect model.

Table 5(b) Comparison and Analysis of Mediate-Effect Model
User’s participation (A)→User’s satisfaction (B)→Job performance (C)

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\Delta\chi^2$</th>
<th>$\Delta$df</th>
<th>CFI</th>
<th>NFI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1, Partial Mediate Model</td>
<td>474.10</td>
<td>164</td>
<td></td>
<td></td>
<td>0.96</td>
<td>0.94</td>
<td>0.96</td>
</tr>
<tr>
<td>Model 2, Direct Model</td>
<td>451.81</td>
<td>165</td>
<td>22.23**</td>
<td>1</td>
<td>0.95</td>
<td>0.93</td>
<td>0.95</td>
</tr>
<tr>
<td>Model 3, Full Model</td>
<td>537.04</td>
<td>165</td>
<td>62.94**</td>
<td>1</td>
<td>0.96</td>
<td>0.93</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Notes: * : P<0.05, ** : P<0.01

When the error of degree of freedom of Chi-Square is 1 and Chi-Square variate ($\Delta\chi^2$) is larger than 3.84, the variate is very significant. In Table 5(b), significant differences show between models 2 and 3, and the path cannot be simplified, so the model of user satisfaction between participation and job performance is a part mediate model.

Table 5(c) Comparison and Analysis of Mediate-Effect Model
Supportive Leadership (A)→User’s satisfaction (B)→Job performance (C)

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\Delta\chi^2$</th>
<th>$\Delta$df</th>
<th>CFI</th>
<th>NFI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1, Partial Mediate Model</td>
<td>441.07</td>
<td>164</td>
<td></td>
<td></td>
<td>0.97</td>
<td>0.94</td>
<td>0.97</td>
</tr>
<tr>
<td>Model 2, Direct Model</td>
<td>496.80</td>
<td>165</td>
<td>28.73**</td>
<td>1</td>
<td>0.94</td>
<td>0.92</td>
<td>0.95</td>
</tr>
<tr>
<td>Model 3, Full Model</td>
<td>439.91</td>
<td>165</td>
<td>1.16</td>
<td>1</td>
<td>0.96</td>
<td>0.94</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Notes: * : P<0.05, ** : P<0.01

In Table 5(c), significant difference of Chi-Square variate ($\Delta\chi^2$) shows between models 2 and 3.
and 1. However, between models 3 and 1, the difference is not significant. When the error of degree of freedom of Chi-Square is 1 and Chi-Square variate ($\Delta \chi^2$) is smaller than 3.84, the model can be simplified according to the path-concise principle. Therefore, the model of user satisfaction between supportive leadership and job performance can be simplified into a full mediate model.

### 4.2.3 Mediate-Effect Verification of Whole Models

The focus of discussion in this section is on the whole models among the five dimensions with which the nested model is compared. Paths of the eight models show in table 6. Path A means training $\rightarrow$ user satisfaction $\rightarrow$ job performance, path B, participation $\rightarrow$ user satisfaction $\rightarrow$ job performance, and path C, supportive leadership $\rightarrow$ user satisfaction $\rightarrow$ job performance.

Table 6 Model Distribution

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Mediate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Partial Mediate</td>
<td>Partial Mediate</td>
<td>Partial Mediate</td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>Full Mediate</td>
<td>Partial Mediate</td>
<td>Partial Mediate</td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td>Partial Mediate</td>
<td>Full Mediate</td>
<td>Partial Mediate</td>
<td></td>
</tr>
<tr>
<td>Model 4</td>
<td>Partial Mediate</td>
<td>Partial Mediate</td>
<td>Full Mediate</td>
<td></td>
</tr>
<tr>
<td>Model 5</td>
<td>Full Mediate</td>
<td>Partial Mediate</td>
<td>Full Mediate</td>
<td></td>
</tr>
<tr>
<td>Model 6</td>
<td>Partial Mediate</td>
<td>Full Mediate</td>
<td>Full Mediate</td>
<td></td>
</tr>
<tr>
<td>Model 7</td>
<td>Full Mediate</td>
<td>Full Mediate</td>
<td>Partial Mediate</td>
<td></td>
</tr>
<tr>
<td>Model 8</td>
<td>Full Mediate</td>
<td>Full Mediate</td>
<td>Full Mediate</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 shows the analyses and comparisons of Table 6:

Table 7 Analysis and Comparison of the Whole Model

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta$ df</th>
<th>CFI</th>
<th>NFI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>359.59</td>
<td>160</td>
<td></td>
<td></td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
</tr>
<tr>
<td>2</td>
<td>397.42</td>
<td>161</td>
<td>37.83**</td>
<td>1</td>
<td>0.97</td>
<td>0.94</td>
<td>0.95</td>
</tr>
<tr>
<td>3</td>
<td>393.25</td>
<td>163</td>
<td>33.66**</td>
<td>3</td>
<td>0.97</td>
<td>0.94</td>
<td>0.95</td>
</tr>
<tr>
<td>4</td>
<td>360.17</td>
<td>161</td>
<td>0.58</td>
<td>1</td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
</tr>
<tr>
<td>5</td>
<td>360.17</td>
<td>162</td>
<td>0.58</td>
<td>2</td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
</tr>
<tr>
<td>6</td>
<td>372.41</td>
<td>162</td>
<td>12.82**</td>
<td>2</td>
<td>0.97</td>
<td>0.95</td>
<td>0.97</td>
</tr>
<tr>
<td>7</td>
<td>393.25</td>
<td>163</td>
<td>33.66**</td>
<td>3</td>
<td>0.97</td>
<td>0.94</td>
<td>0.95</td>
</tr>
<tr>
<td>8</td>
<td>393.25</td>
<td>163</td>
<td>33.66**</td>
<td>3</td>
<td>0.97</td>
<td>0.94</td>
<td>0.95</td>
</tr>
</tbody>
</table>
5. Conclusion

5.1 Results of Research

5.1.1 Relationship between Training and User Satisfaction

The hypothesis that a positive relationship exists between training and user satisfaction stands, conforming to the hypothesis presented in this research and the literature of Bradley and Lee (2007). When companies start to use the ERP system, their operational procedures might have to be modified. As a result, ERP system users must have additional training before starting operations in order to become familiar with the modified operation procedures so that the ERP system will not frustrate them.

5.1.2 Relationship between Participation and User Satisfaction

The hypothesis that a positive relationship exists between participation and user satisfaction, does not stand. The reason might be that the systems used by average SMEs are unlike the customized ones used by large-scale enterprises. Theirs are pre-designed software, in which SME users can only do simple modifications, such as adjusting the titles of the forms, adding or scaling columns down, etc. They cannot rewrite the system program in accordance with company’s operational procedures. Consequently, participation is lower and most users are probably only using simple functions of the ERP systems, such as key in, search, print, etc.

5.1.3 Relationship between Supportive Leadership and User Satisfaction

The hypothesis that a positive relationship exists between supportive leadership and user satisfaction stands, conforming to the hypothesis presented in this research. Using the ERP
system means not only that the company’s data management is advanced, but also that operational procedures for all the company’s staff have advanced as well. When a company starts to use the ERP system, supportive leadership is very important. Not only does management support the budget, they must also respond and answer their staff’s questions about the ERP system, thereby helping them to understand more.

5.1.4 Relationship between User Satisfaction and Job performance
The hypothesis that a positive relationship exists between user satisfaction and job performance stands, conforming to the hypothesis of this research. This result also fits with the research of Kositanurit et al. (2006). According to the existing literature, user satisfaction in large-scale enterprises can improve job performance, and the same can be said of SMEs.

5.1.5 User Satisfaction plays a mediate-effect role between Training and Job performance
The hypothesis that user satisfaction plays a mediate-effect role between training and job performance is partly supported, accounting for the fact that job performance plays a part mediate-effect role at this point, a direct relationship exists between training and user satisfaction, and a mediate relationship comes with user satisfaction as well.

5.1.6 User satisfaction plays a mediate-effect role between Participation and Job performance
The hypothesis that user satisfaction plays a mediate-effect role between participation and job performance is partly supported, accounting for the fact that job performance plays a part mediate-effect role at this point, a direct relationship exists between participation and user satisfaction, and a mediate relationship comes with user satisfaction as well.

5.1.7 User satisfaction plays a mediate-effect role between Supportive Leadership and Job performance
The hypothesis that user satisfaction plays a mediate-effect role between supportive leadership and job performance is supported, accounting for the fact that job performance plays a full mediate-effect role at this point and user satisfaction must play a mediate role between supportive leadership and job performance.

5.2 Implications of These Results for Management
Existing literature on ERP systems and the empirical research conducted here clearly show that using the ERP system can improve job performance in a company. Unlike large-scale enterprises, SME usage of a customized ERP system is harder because of the high cost. Therefore, SMEs should consider using other types of information systems that are not as expensive as the ERP system but are effective for their own use.

With respect to training, most SME users are beginners, and are not familiar with the ERP system. A faultless training program will help them better understand how to operate the system, which will raise their satisfaction and job performance. As a result, SMEs should
look for suppliers to be able to offer the necessary training, while, in turn, the suppliers
aiming at the SME market should learn more about SME training needs.

When a company sets up an ERP system, user’s work procedures must be changed and
extra procedures of derived from the information system will have to be added into the
traditional work load. At this point, supportive leadership can assist help users to recognize
the ERP system’s value, thereby avoiding user’s rejection.

This research also testifies that after SMEs use the ERP system, job performance is
improved in the company. Furthermore, the fact that SMEs are increasingly having to operate
in a global planning-and-management oriented environment, means that they should be more
actively in setting up ERP systems to enforce their competence for business continuity.

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